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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,005	11/13/2000	Purnam Anil Sheth	CISCO-3096	8953

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EXAMINER	
NGUYEN, QUANG N	

ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 10/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/712,005	SHETH ET AL.	
	Examiner	Art Unit	
	Quang N. Nguyen	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-71* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *52-71* is/are allowed.

6)☒ Claim(s) *1-5,9-11,14-18,22-24,27-31,35-37,40 and 42-51* is/are rejected.

7)☒ Claim(s) *6-8,12,13,19-21,25,26,32-34,38,39 and 41* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 November 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/18/2006 has been entered.

Claims 1, 2, 4, 6, 9, 12, 14, 15, 17, 19, 22, 25, 27, 28, 30, 32, 35, 38, 40, 46, 47, 52, 57, 60, 62, 65, 67 and 70 have been amended. Claims 1-71 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 14-15 and 27-28 are rejected under 35 U.S.C. 102(a) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Jacobson et al. (US 6,044,402), hereinafter "Jacobson".

4. As to claim 1, **Jacobson** teaches a method for controlling subscriber access in a network capable of establishing connections with a plurality of domain sites, comprising:

receiving, at an access server coupled to a first communication network and a second communication network, a communication from a subscriber on said first communication network *(i.e., receiving, at a gateway server 106 coupled to a first subnet 102-1 and a second subnet 102-2, a communication packet 114 transmitted between the protected hosts 104-1 within the subnet 102-1 and the remote hosts 104-2 within the subnet 102-2),* said communication optionally including a domain site identifier associated with a domain site on said second communication network *(each communication packet 114 includes a destination physical address 154, wherein the destination physical address 154 is the physical address of a single device/terminal or the physical address of the gateway of a subnet, hence, one having ordinary skill in the art would appreciate that the destination physical address 154 can be implemented as a domain site identifier associated with a domain site on said second communication network)* **(Jacobson, Fig. 1, col. 3, lines 8-56 and col. 12, lines 33-59)**; and

authorizing subscriber access to said domain site on said second communication network upon determining, in response to said receiving, that said domain site identifier is included in a list of authorized domain sites associated with a virtual circuit through which said communication is received *(the blocking controller determines whether the destination address 154 of the communication packet 114 in the connection information set, which is the network address of the destination, is in the network access list; if it is, then the connection is to be allowed)* **(Jacobson, col. 18, lines 42-53)**.

5. As to claim 2, **Jacobson** teaches the method of claim 1, further comprising terminating said communication when said domain site identifier is not included in said list *(if the destination physical address 154 is not in the network address access list, then the connection is to be blocked)* **(Jacobson, col. 18, lines 42-53)**.

6. Claims 14-15 are corresponding program storage device claims of method claims 1-2; therefore, they are rejected under the same rationale.

7. Claims 27-28 are corresponding apparatus claims of method claims 1-2; therefore, they are rejected under the same rationale.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 3-5, 9-11, 16-18, 22-24, 29-31, 35-37, 40 and 42-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson, in view of Loehndorf, Jr. et al. (US 6,094,437), hereinafter "Loehndorf".

10. As to claims 3-4, **Jacobson** teaches the method of claim 1, but does not explicitly teach said communication comprises a Point-to-Point Protocol (PPP) session, which in turn comprises a tunneling session and said PPP session is forwarded onto a tunnel associated with an assigned tunnel ID when said subscriber is authorized to access said domain site.

In an analogous art, **Loehndorf** teaches that the Point-to-Point Protocol *(PPP)* has been standardized by the Internet Engineering Task Force *(IETF)* to be used to allow Internet Protocol *(IP)* and other protocols *(such as IPX, XNS, AppleTalk, etc.)* to be sent over non-IP mediums such as the Public Switched Telephone Network *(PSTN)*, ATM, Frame Relay, SONET, etc. in Internet communications. **Loehndorf** also teaches the IETF developed the L2TP *(Layer Two Tunneling Protocol)* to allow the PPP session to be tunneled over the Internet by establishing the tunnel using a tunnel ID *(i.e., forwarding PPP session onto a tunnel associated with an assigned funnel ID)* **(Loehndorf, col. 1, line 43 – col. 3, line 25 and col. 11, lines 36-67)**.

Therefore, it would have been obvious to one having ordinary skills in the Data Processing Art at the time the invention was made to combine the teachings of **Jacobson** and **Loehndorf**, since both references are directed to computer-to-computer session/connection establishing and managing, hence, would be considered to be analogous based on their related fields of endeavor. One would be motivated to do so for various purposes such as information hiding, adding needed functionality, or improving functionality by using the tunneling technology to enable one network to securely send its data via other networks' connections **(Loehndorf, col. 1, lines 33-54)**.

11. As to claim 5, **Jacobson-Loehndorf** teaches the method of claim 4, wherein said tunnel session comprises an L2TP session *(the IETF developed the L2TP to allow the PPP to be tunneled over the Internet)* **(Loehndorf, col. 2, line 66 – col. 3, line 7)**.

12. As to claim 9, **Jacobson-Loehndorf** teaches the method of claim 5, wherein said determining further comprises:

issuing a tunnel ID request including domain site identifier and a virtual circuit identifier; and receiving a tunnel ID *(the routing function of L2TP access payloads is performed on the L2TP tunnel information, which includes the L2TP tunnel ID and call ID with the proper IP and UDP source and destination addresses, i.e., the incoming call tunnel addressing "ICT" that the L2TP Access Concentrator "LAC" communicates the service provider that it wishes to use, by the tunnel that it chooses to send data over)* **(Loehndorf, col. 11, lines 10-55)**.

13. As to claim 10, **Jacobson-Loehndorf** teaches the method of claim 9, wherein an AAA server services said tunnel ID request **(Loehndorf, col. 2, lines 32-46)**.

14. As to claim 11, **Jacobson-Loehndorf** teaches the method of claim 9, wherein said virtual circuit identifier comprises a VPINCI identifier *(**Loehndorf** teaches that IP packets may be transported as AMT cells, wherein it is well-known in the art that each ATM cell contains 48 bytes payload and 5 bytes header containing virtual path identifier "VPI" and virtual channel identifier 'VC/ " fields, which defines a channel).*

15. Claims 16-18 and 22-24 recite program storage device claims that contain substantially the same limitations as method claims 3-5 and 9-11; therefore, they are rejected under the same rationale.

16. Claims 29-31 and 35-37 recite apparatus claims that contain substantially the same limitations as method claims 3-5 and 9-11; therefore, they are rejected under the same rationale.

17. Claims 40 and 42-51 recite access server claims that contain substantially the same limitations as method claims 1, 3-5 and 9-11; therefore, they are rejected under the same rationale.

Allowable Subject Matter

18. Claims 6-8, 12-13, 19-21, 25-26, 32-34, 38-39 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

19. Claims 52-71 are allowed.

Response to Arguments

20. In the remarks, applicant argued in substance that

(**A**) Prior Art does not teach, *"authorizing subscriber access to said domain site on said second communication network upon determining, in response to said receiving, that said domain identifier is included in a list of authorized domain sites associated with a virtual circuit through which said communication is receiving"*, as recited in claim 1.

As to point (**A**), before addressing the argument, Examiner respectfully submits that the language of the limitation cited in the quotation "domain site identifier" can be given the broadest and reasonable interpretation in light of the specification as according to the Webopebia.com definition of "domain", wherein within the Internet, domains are defined by the IP address and all devices sharing a common part of the IP address are said to be in the same domain and according to the "Microsoft Computer Dictionary – Fifth Edition" definition of "domain name" – An address of a network connection that identifies the owner of that address in a hierarchical format: *server.organization.type*.

Here, **Jacobson** teaches a method for controlling subscriber access in a network capable of establishing connections with a plurality of domains, i.e., domain sites, wherein the blocking controller 170 determines whether to block or authorize the connection based on the network access list 212 *(Examiner respectfully submits that it's obvious to one having ordinary skill in the art that the network access list can contain a*

plurality of network addresses such as IP addresses, URLs and/or domain names, i.e., domain site identifiers that are usually associated with network ports, channels, tunnels, links, paths via which the destination is requested to be accessed or connected).

Jacobson also teaches each communication packet 114 includes a destination physical address 154, wherein the destination physical address 154 maybe the physical address of the gateway 106 of a subnet, hence, the destination physical address 154 can be implemented as a domain name or a domain site identifier associated with a domain site on a communication network **(Jacobson, col. 12, lines 33-59)**.

Jacobson then teaches that the blocking controller determines whether the destination physical address 154 of the communication packet 114 in the connection information set, which is the network address of the destination, is in the network access list of plurality of network addresses; if it is, then the connection is to be allowed *(i.e., authorizing subscriber access to said domain site of the domain site identifier is included in the list of authorized domain sites)* **(Jacobson, col. 18, lines 42-53)**.

Hence, Prior Art does teach *"authorizing subscriber access to said domain site on said second communication network upon determining, in response to said receiving, that said domain identifier is included in a list of authorized domain sites associated with a virtual circuit through which said communication is receiving"*, as recited in claim 1.

21. Applicant's arguments as well as request for reconsideration filed on 09/18/2006 have been fully considered but they are not deemed to be persuasive.

22. A shortened statutory period for reply to this action is set to expire THREE (3) months from the mailing date of this communication. See 37 CFR 1.134.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Quang N. Nguyen
Patent Examiner
AU – 2141